Texas Emissions Reduction Plan (TERP)

Alternative Fueling Facilities Program (AFFP)

Fiscal Year 2018
Grant Application Workshop

TERP
TEXAS EMISSIONS REDUCTION PLAN
A PROGRAM OF THE TCEQ

Workshop Agenda

- Grant Application Forms
- Project Technical Review and Scoring
- Existing Fueling Stations - Maps

AFFP Grant Application

FORM 6a: Proposed Station Location

Forms 6a-6c will be used to ascertain the location, service capacity, and fuel storage capacity of the proposed station. This section will be scored on how the exact location of the proposed project closes the existing infrastructure gaps in the Clean Transportation Zone.**(up to 40 points).**

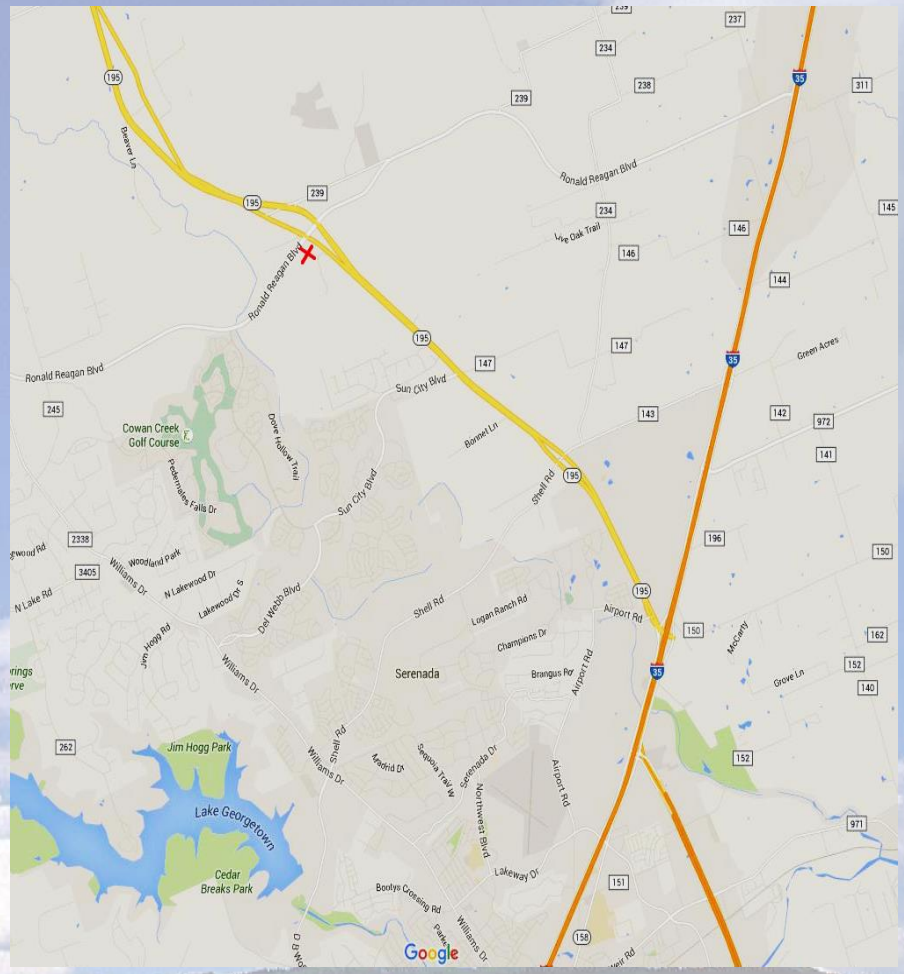
1. Proposed Station Location (address)

Physical Address Line 1:	1234 Anylane Drive
Physical Address Line 2:	
City:	Goodtown
State:	Texas
Postal/Zip Code:	99999
County:	Lennon Co.
Longitude: (ex. degree decimal: -99.2347)	-99.234756
Latitude: (ex. degree decimal: 31.3057)	31.305758

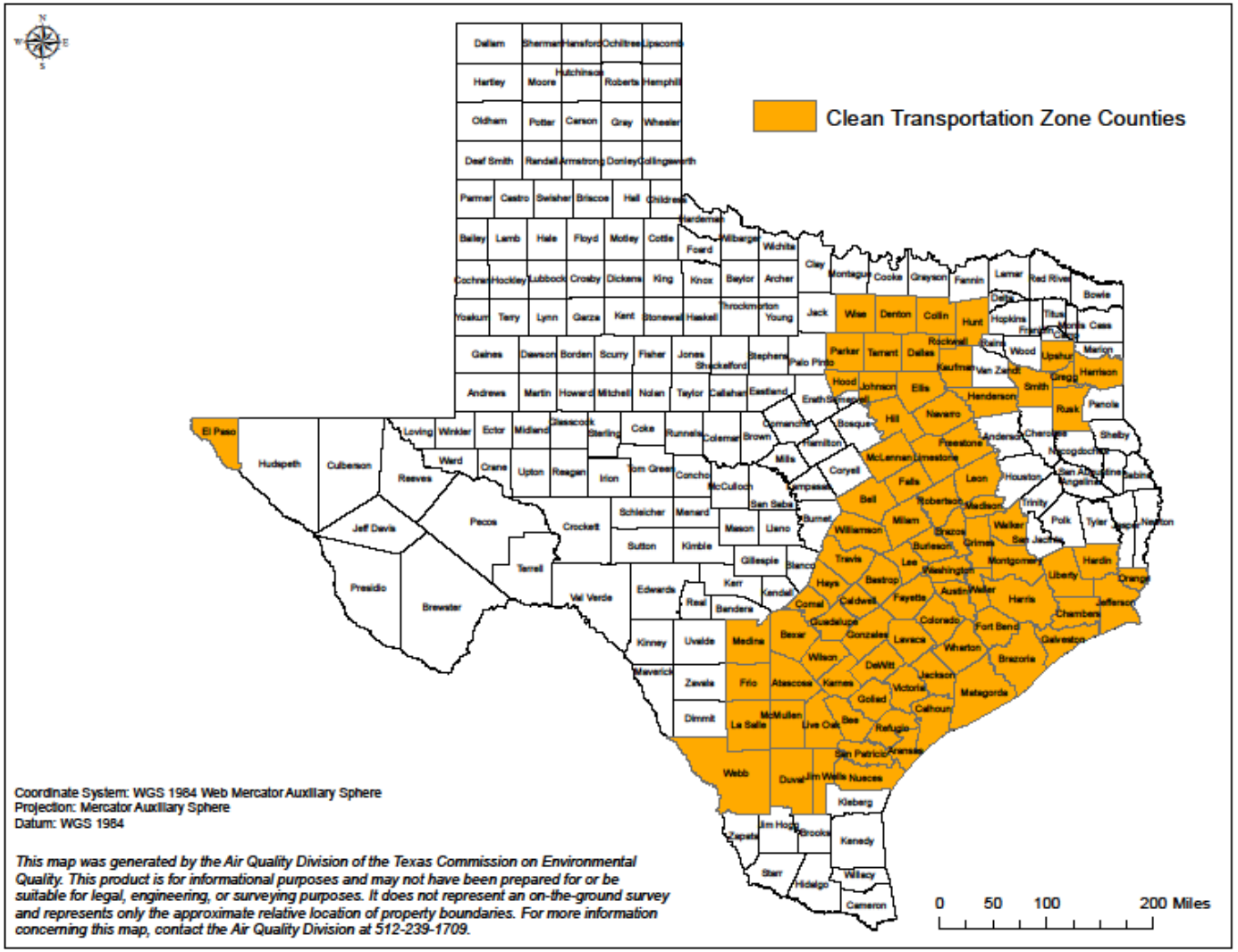
AFFP Grant Application

FORM 6a: Proposed Station Location

2. Proposed Station Location (graphic representation)

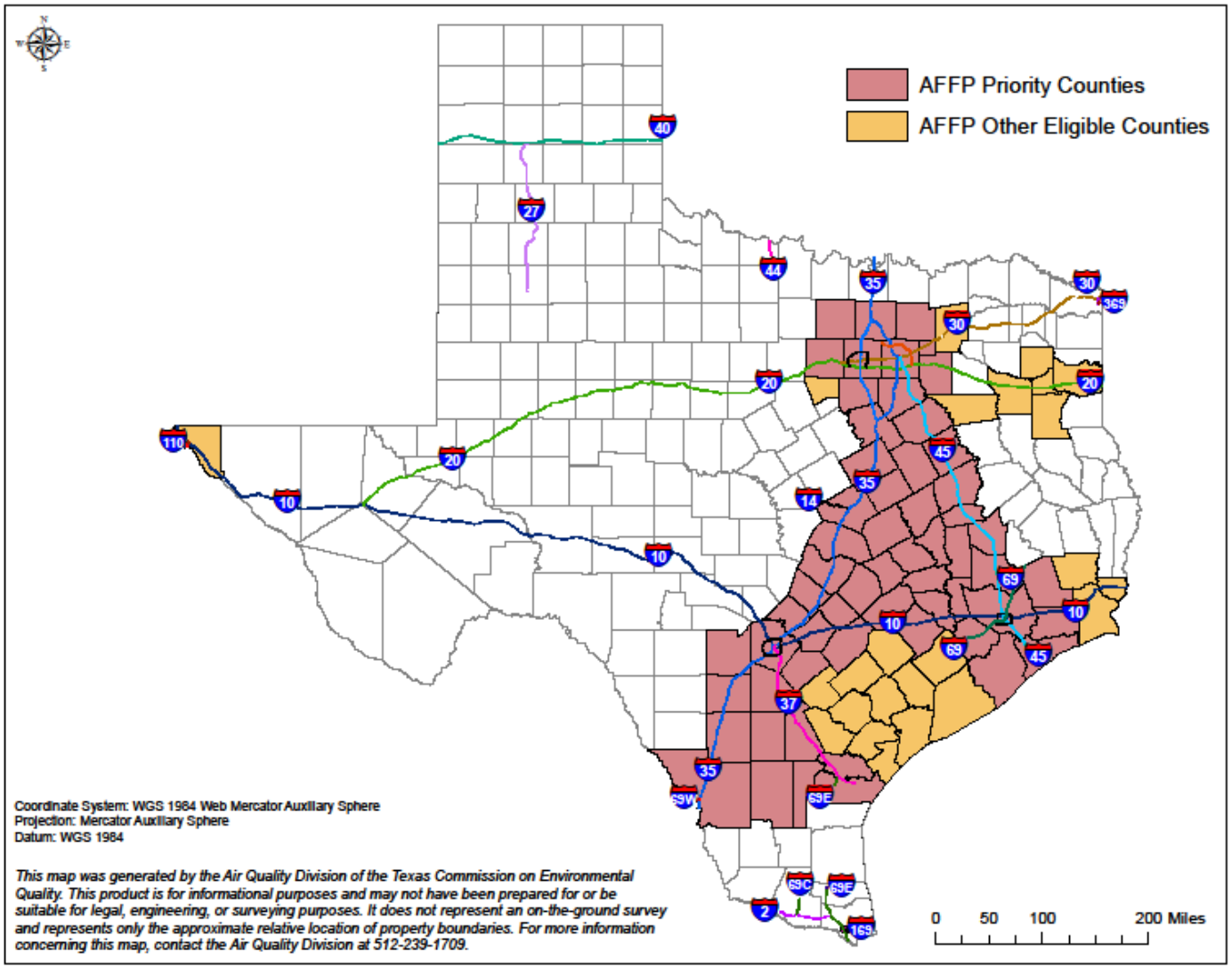


Clean Transportation Zone



AFFP Eligible Counties

(Priority and Other Eligible Counties)



AFFP Project Application

FORM 6b: Proposed Station Location and Service Capacity

3. Fuel Storage Capacity

In units of your choice, please provide the proposed on-site fuel storage capacity as either mass, Gasoline Gallon Equivalent (GGE), Diesel Gallon Equivalent (DGE), or (for gaseous fuels) pressure and volume for all fuels included in the project in the table below:

Fuel Type	CNG	LNG	Propane	Methanol	Biodiesel	Hydrogen
Pressure: (include units)				N/A	N/A	
Volume: (include units)						
Mass: (include units)						
Gasoline Gallons Equivalent:						
Diesel Gallons Equivalent:						

Where applicable, please provide information for on-site compressor/pump capacity (compression rate) in units of your choice in the table below:

Fuel Type	CNG	LNG	Propane	Methanol	Biodiesel	Hydrogen
Gasoline Gallons Equivalent/min: (GGE/min)						
Diesel Gallons Equivalent/min: (DGE/min)						
Standard Cubic Feet per Minute: (scfm)						
Gallons/minute: (gal/min)						
Other: (include units)						

FORM 6c: Service Capacity

4. Fuel Service Capacity (Please complete for all fuels included in the project.)

CNG Fast Fill: Please provide information regarding fast fill capacity of the project.	
Number of Dispensers:	
Number of Nozzles: (Number of vehicles that can be fueled simultaneously)	
Fill Rate at Nozzle: (Gasoline Gallons Equivalent /min)	
Fill Rate at Nozzle: (Diesel Gallons Eqivalent/min)	
CNG Time Fill: Please provide information regarding time fill capacity of the project.	
Number of Dispensers:	
Number of Nozzles: (Number of vehicles that can be fueled simultaneously)	
Fill Rate at Nozzle: (Gasoline Gallons Equivalent/min)	
Fill Rate at Nozzle: (Diesel Gallons Eqivalent/min)	
LNG: Please provide information regarding service capacity of the project.	
Number of Dispensers:	
Number of Nozzles: (Number of vehicles that can be fueled simultaneously)	
Fill Rate at Nozzle: (Gasoline Gallons Equivalent/min)	
Fill Rate at Nozzle: (Diesel Gallons Eqivalent/min)	
Hydrogen: Please provide information regarding fuel generation for and service capacity of the project.	
Number of Dispensers:	
Number of Nozzles: (Number of vehicles that can be fueled simultaneously)	
Fill Rate at Nozzle: (Diesel Gallons Eqivalent/min)	
Fill Rate at Nozzle: (Gasoline Gallons Equivalent/min)	
Generated Off-Site:	
Generated On-Site: (Electrolysis)	
Generated On-Site: (Reforming)	
Generated On-Site: (Other)	

FORM 6c: Service Capacity (cont.)

Propane or LPG:
Please provide information providing service capacity of the project.

Number of Dispensers:	
Number of Nozzles: (Number of vehicles that can be fueled simultaneously)	
Fill Rate at Nozzle: (Gasoline Gallons Equivalent /min)	
Fill Rate Nozzle: (Diesel Gallons Equivalent/min)	

Methanol (M85):
Please provide information regarding service capacity of the project.

Number of Dispensers:	
Number of Nozzles: (Number of vehicles that can be fueled simultaneously)	
Fill Rate at Nozzle: (Gasoline Gallons Equivalent /min)	
Fill Rate at Nozzle: (Diesel Gallons Equivalent/min)	

Biodiesel:
Please provide information regarding the service capacity of the project.

Number of Dispensers:	
Number of Nozzles: (Number of vehicles that can be fueled simultaneously)	
Fill Rate at Nozzle: (Gasoline Gallons Equivalent /min)	
Fill Rate at Nozzle: (Diesel Gallons Equivalent/min)	

Electric Charging Station:
List the number of proposed charging outlets for each applicable service type.

AC Level 1:	
AC Level 2:	
DC Fast Charging:	

Other (list Service Voltage and Number of Proposed Charging Outlets):

AFFP Project Technical Review

Project Selection Methodology considers proximities to:

- interstate, US, and state highways;
- major traffic nodes (TxDOT 2016 traffic data); and
- existing fueling facilities (area fueling capacity density - no. of nozzles/1000 sq. miles).

AFFP Site-Specific Considerations

- **Fuel type offered: CNG, LNG, or both**
- **Facility size (no. fueling nozzles)**
- **Technical Review**
  1. On-site fuel buffer storage capacity
  2. Compressor/pump rated capacity
  3. Fuel service capacity: no. of nozzles, fill rates
  4. Proximity to sensitive receptors

AFFP Scoring Points

PROGRAM SCORING

- Project Objectives (max **15** pts)
- Project Feasibility and Planning (max **20** pts)
- Qualifications and Relevant Experience (max **5** pts)

TECHNICAL SCORING

- Proximity to Existing Facilities (max **20** pts)
- Distance to a High-Traffic segment of Hwy (max **20** pts)

Total: (max **80** pts)

AFFP Scoring Preferences

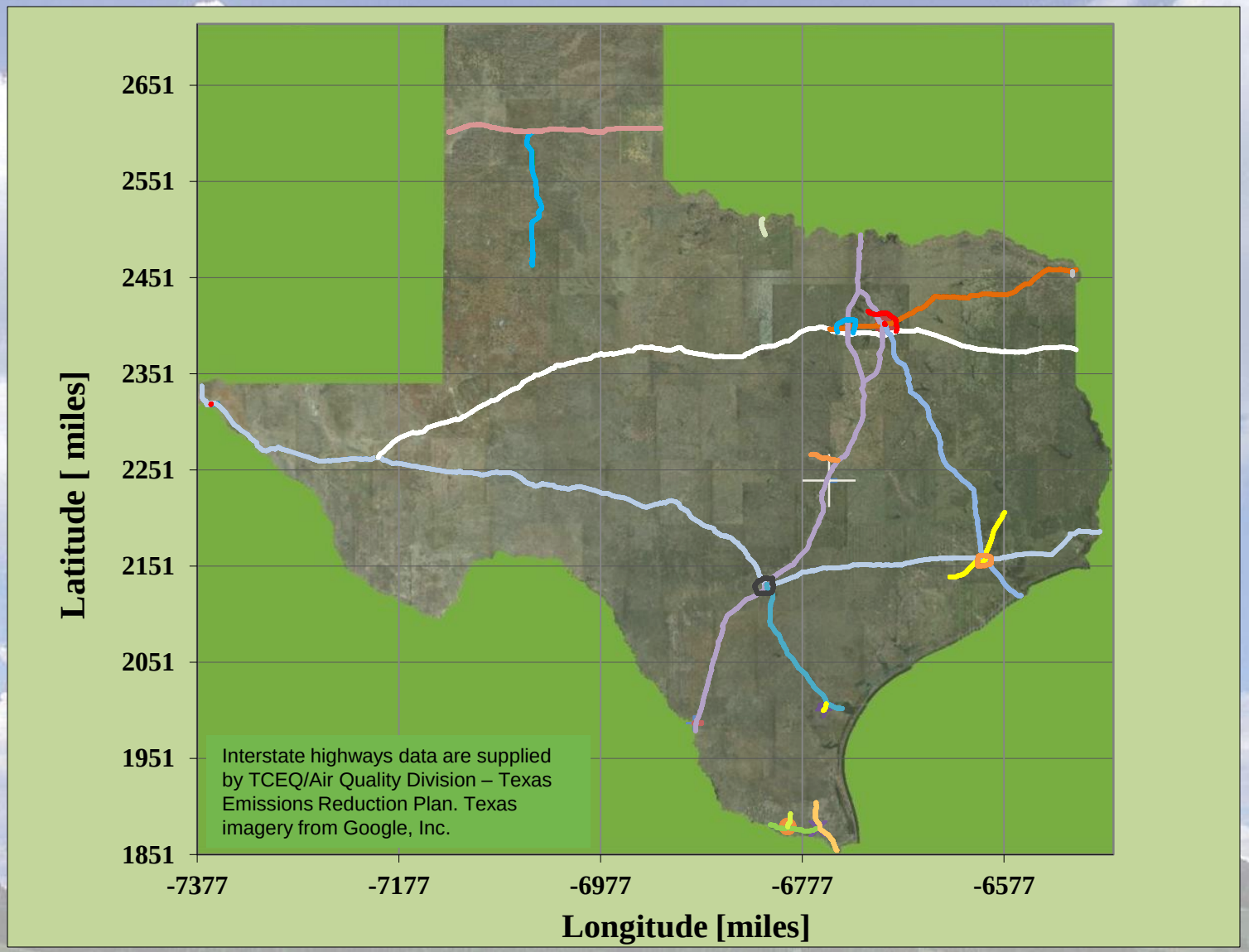
Applicants who meet the following criteria will have the relevant weighting factors applied to their total score:

1. **Multiple Fuels Offered (20%)** **(CNG & LNG only)**
2. **Proximity to an interstate highway (20%)**
3. **Location in AFFP priority county (20%)**
4. **Proximity to a US or state highway (10%)**

*Applicant cannot qualify for both #2 and #4.

*Total maximum score for a project is **128 points**.*

Texas Interstate Highways

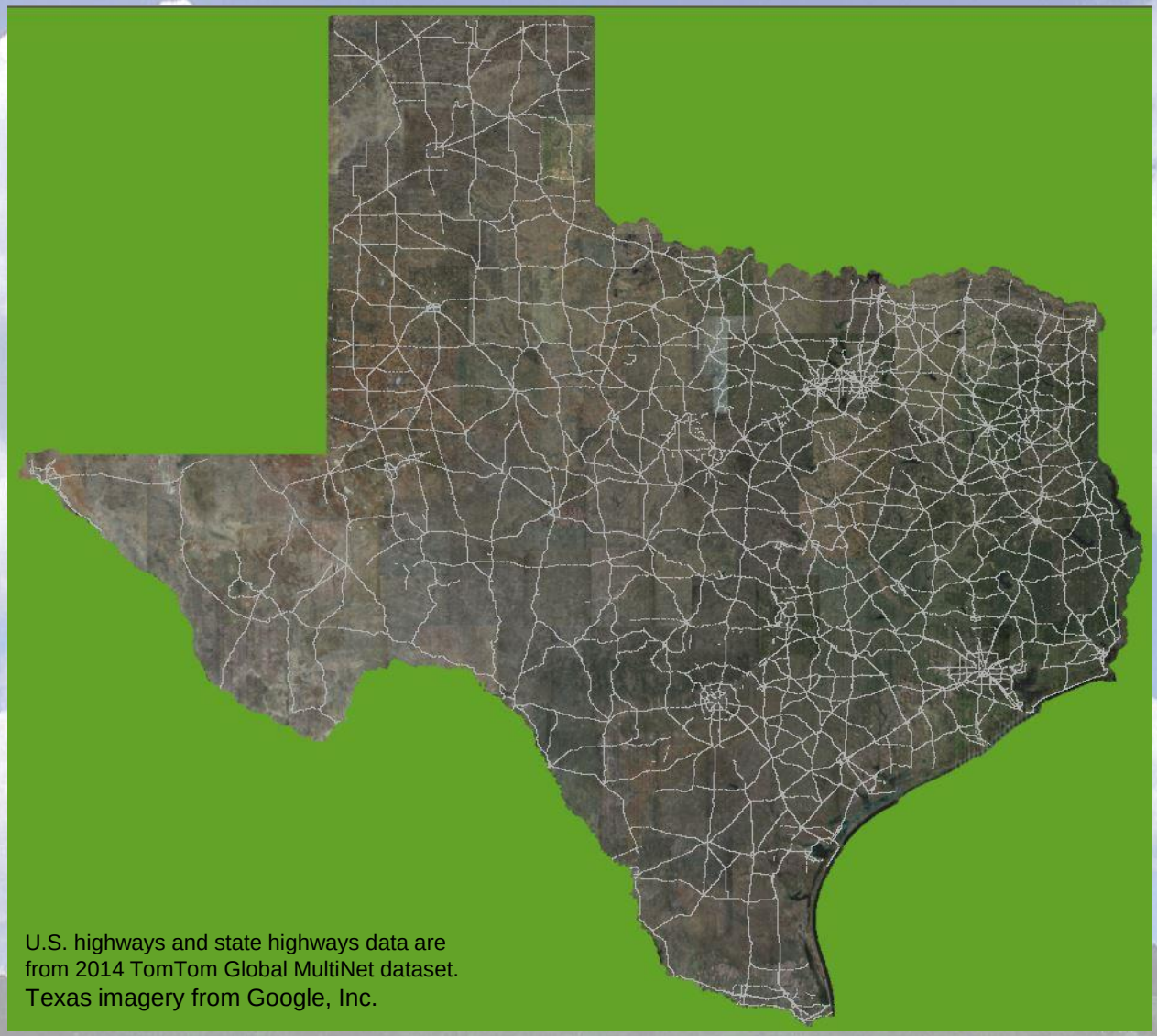


Texas Interstate Highways

INTERSTATE HIGHWAY DESIGNATION	INTERSTATE TYPE
I-2	PRIMARY
I-10	PRIMARY
I-14	PRIMARY
I-20	PRIMARY
I-27	PRIMARY
I-30	PRIMARY
I-35	PRIMARY
I-35W	PRIMARY
I-35E	PRIMARY
I-37	PRIMARY
I-40	PRIMARY
I-44	PRIMARY
I-45	PRIMARY
I-69	PRIMARY
I-69C	PRIMARY
I-69E	PRIMARY
I-69E (Southern section)	PRIMARY
I-69W	PRIMARY

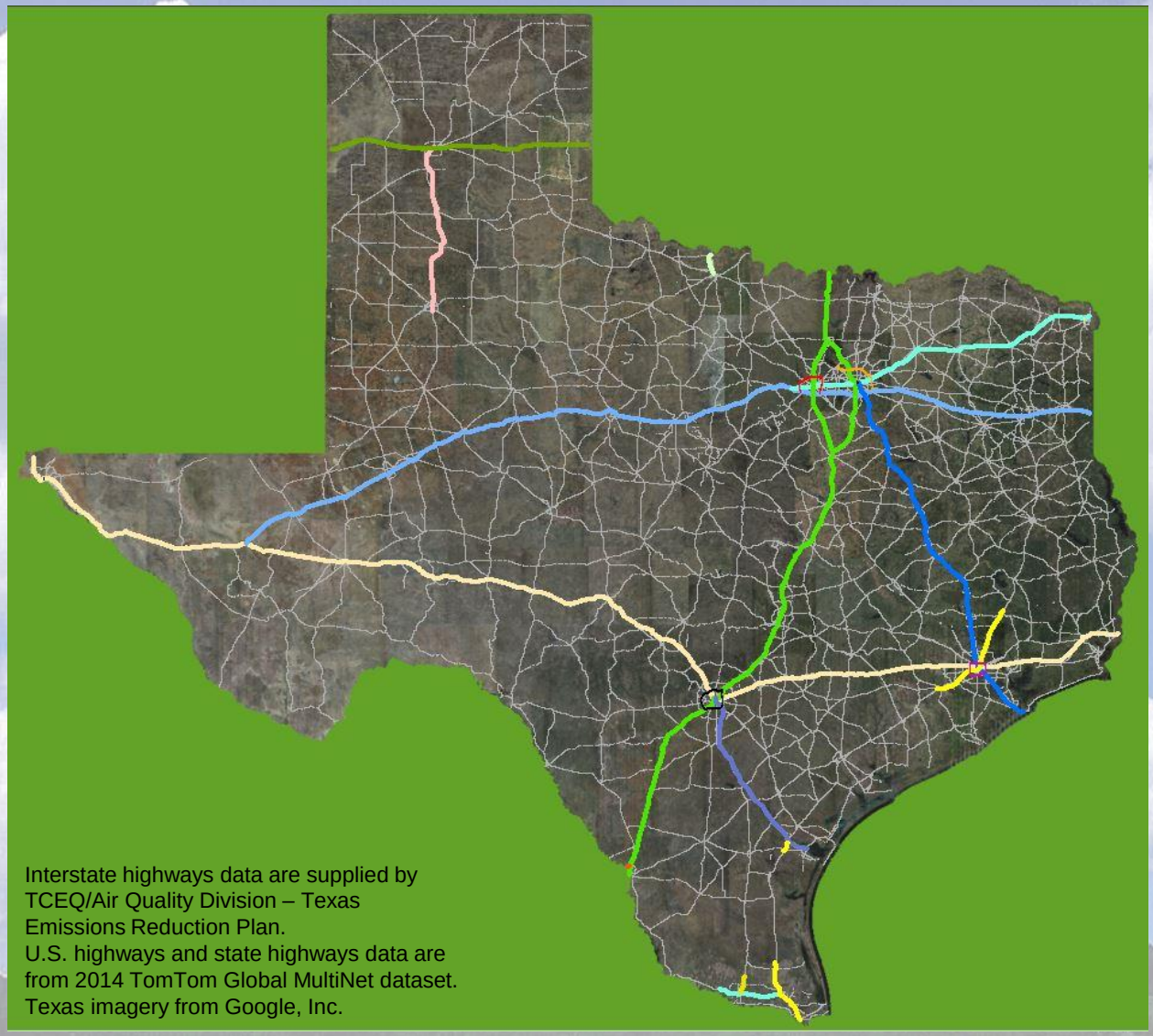
INTERSTATE HIGHWAY DESIGNATION	INTERSTATE TYPE
I-110	AUXILIARY
I-169	AUXILIARY
I-345	AUXILIARY
I-369	AUXILIARY
I-410	AUXILIARY
I-610	AUXILIARY
I-635	AUXILIARY
I-820	AUXILIARY

Digitized State and U.S. Highways



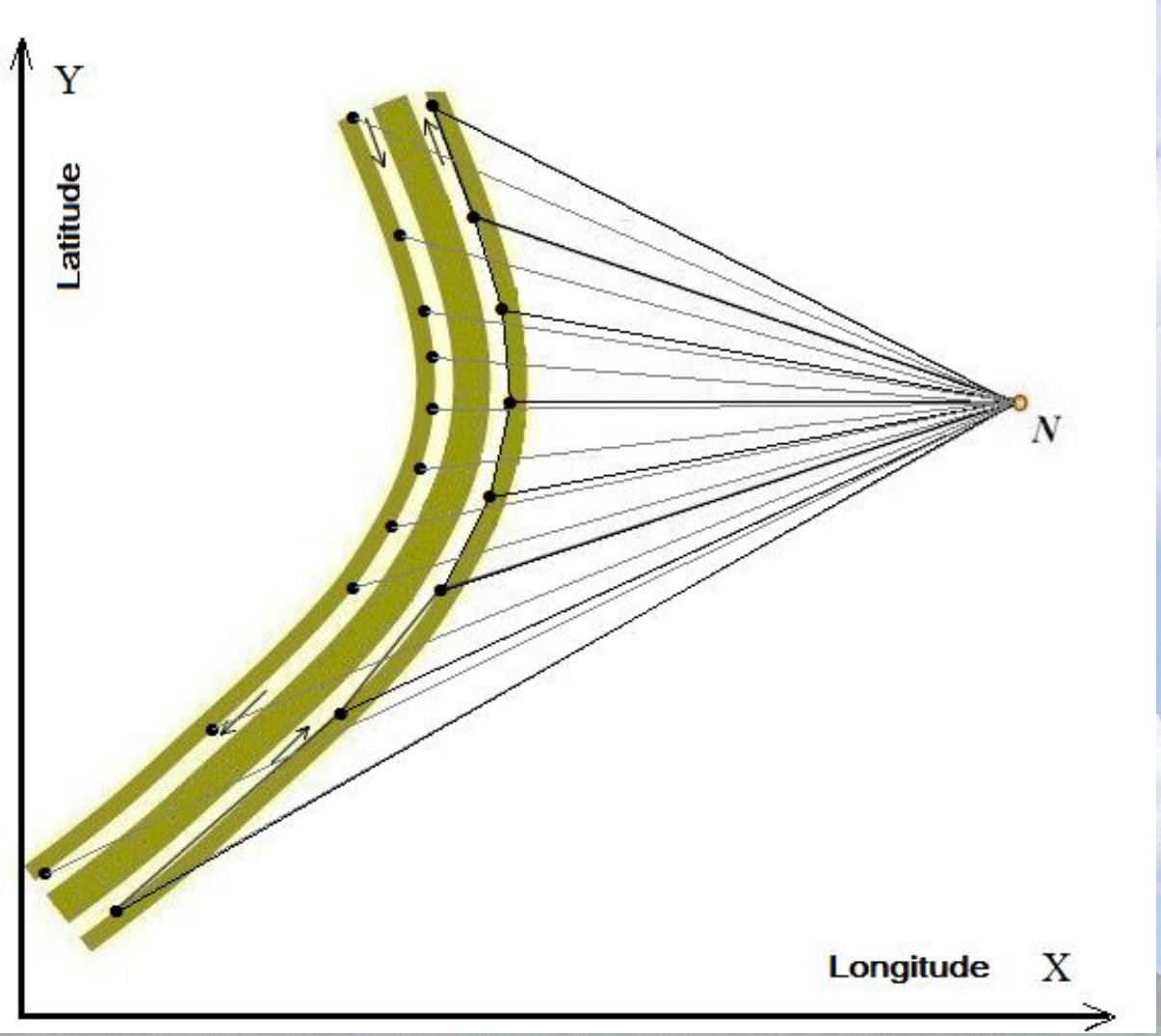
U.S. highways and state highways data are from 2014 TomTom Global MultiNet dataset.
Texas imagery from Google, Inc.

Interstate, U.S. and State Highways

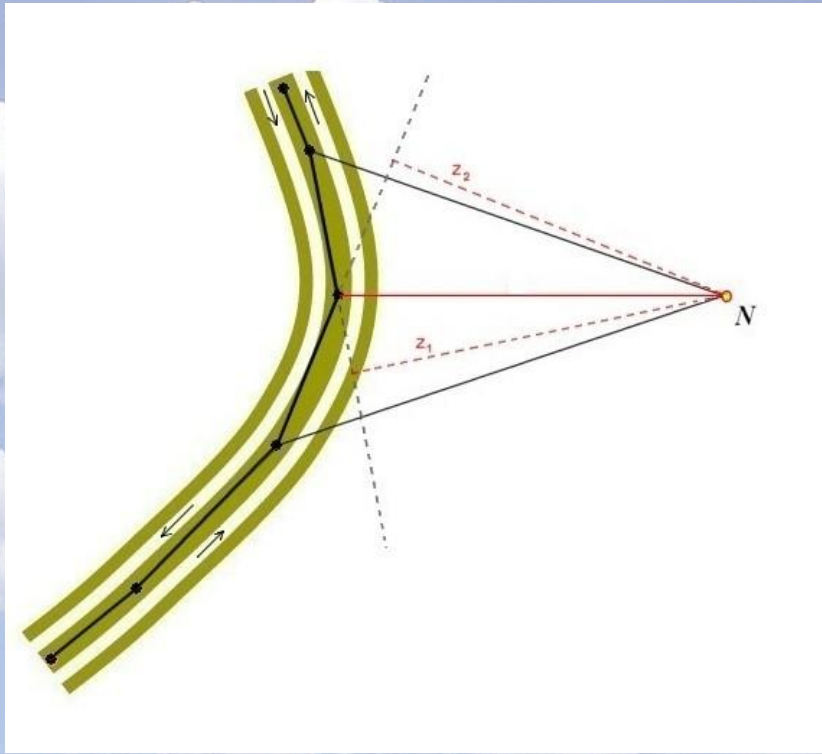


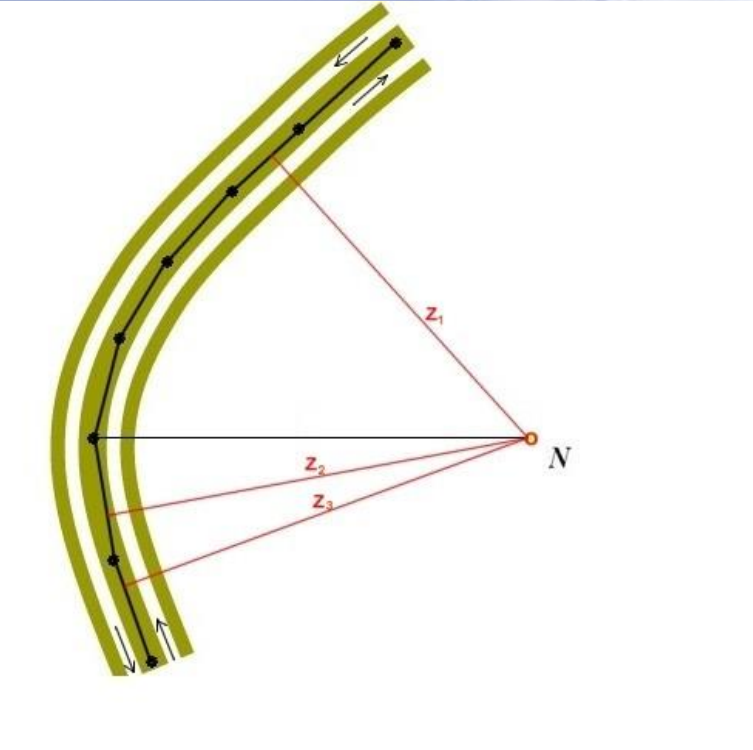
Interstate highways data are supplied by TCEQ/Air Quality Division – Texas Emissions Reduction Plan.
U.S. highways and state highways data are from 2014 TomTom Global MultiNet dataset.
Texas imagery from Google, Inc.

Proximity to Highways



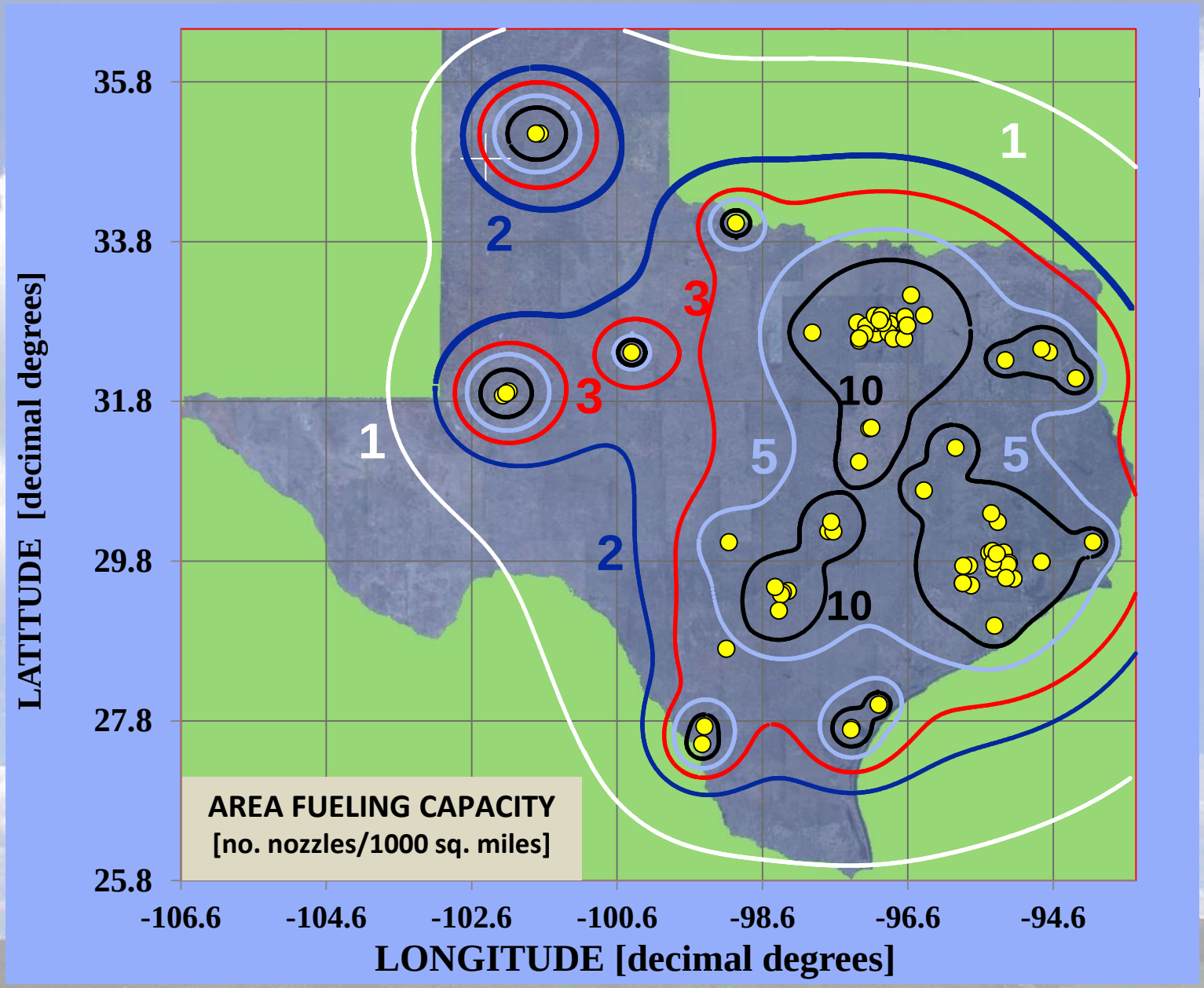
Distance to a Curved Section of Highway





The spacing between the digitized points is comparable to the width of a highway.

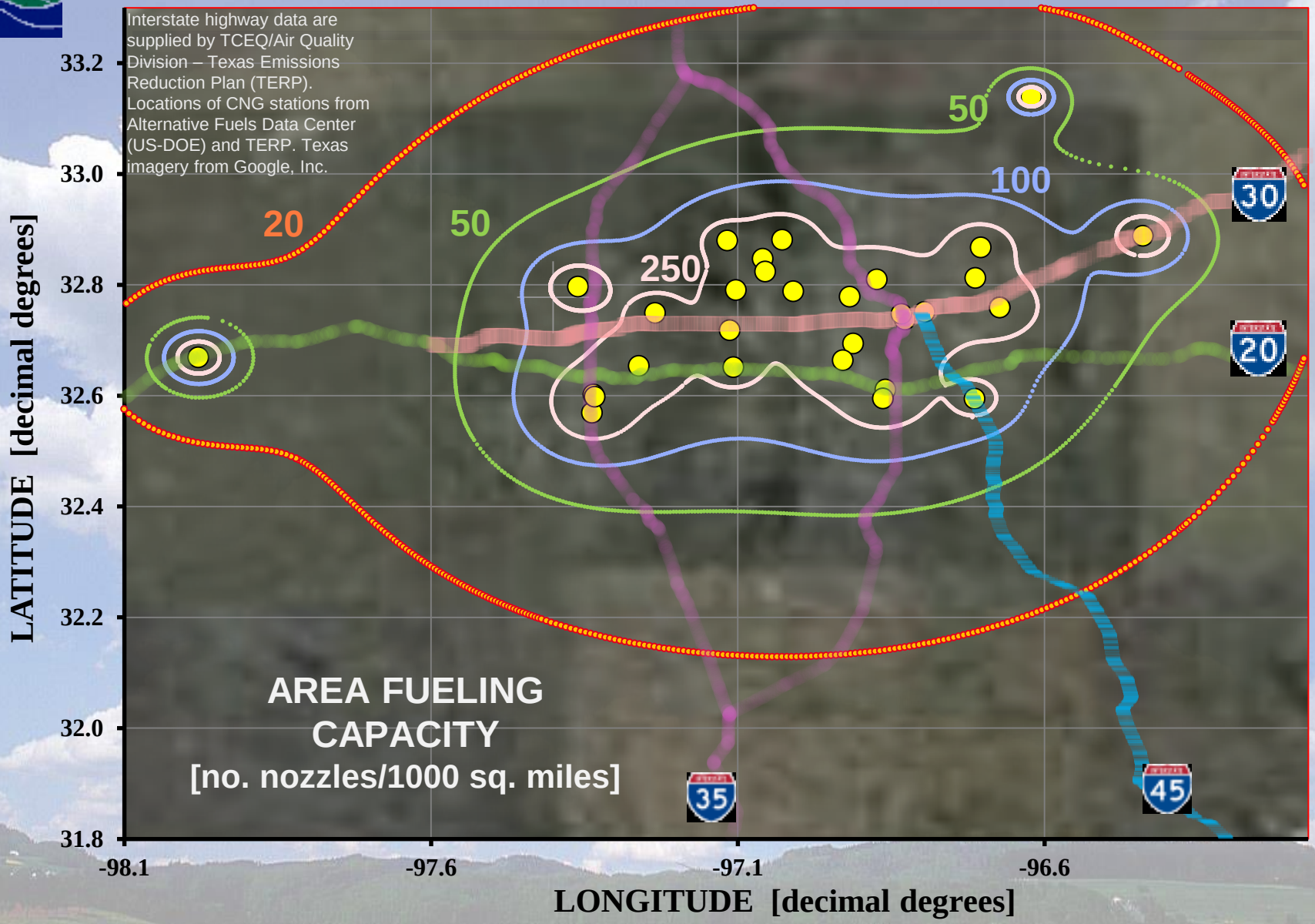
Public CNG Fueling Capacity



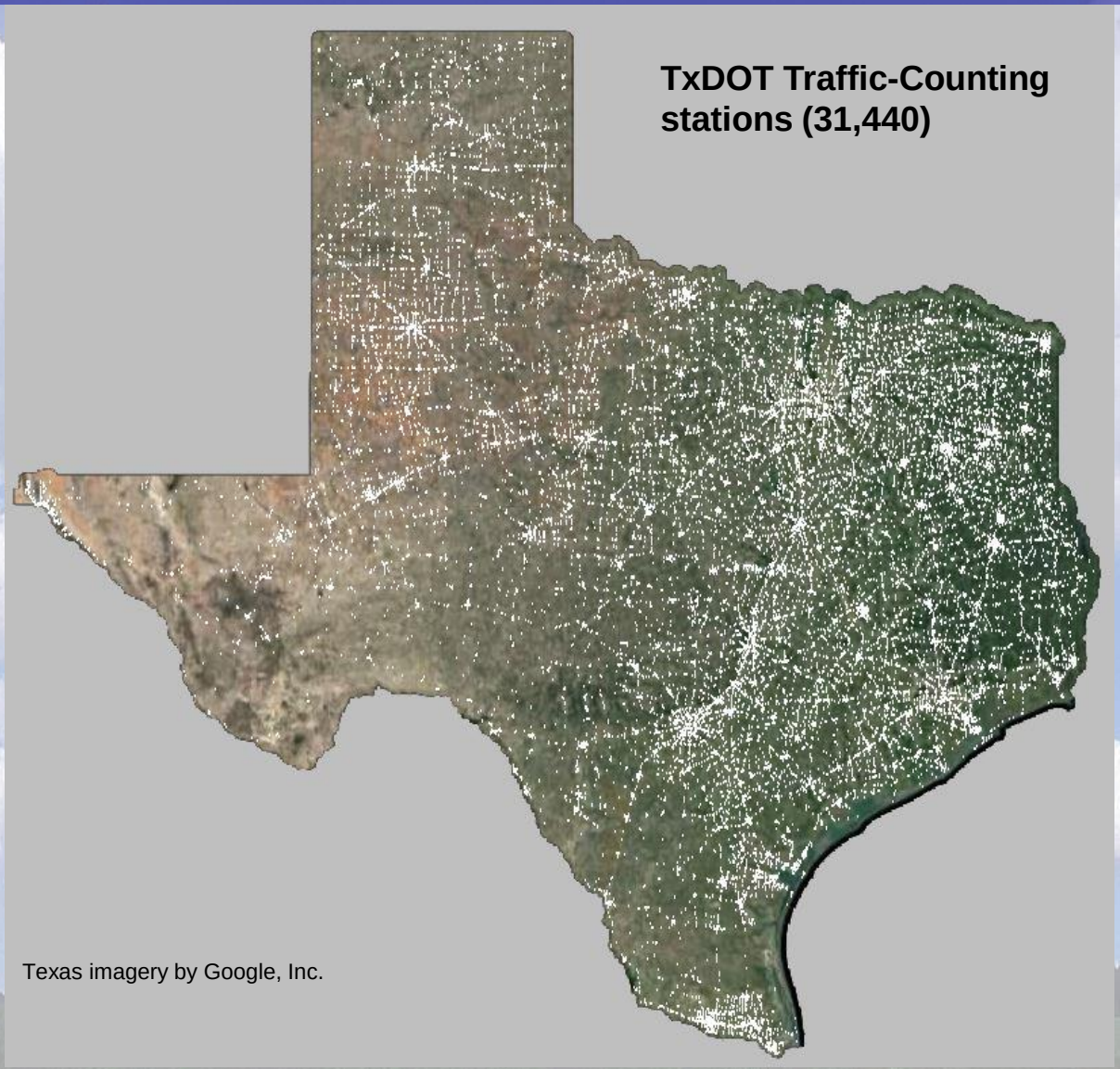
Interstate highway data are supplied by TCEQ/Air Quality Division – Texas Emissions Reduction Plan (TERP).
Locations of fueling stations from Alternative Fuels Data Center (UD-DOE) and TERP.
Texas imagery from Google, Inc.

Public CNG Fueling Capacity

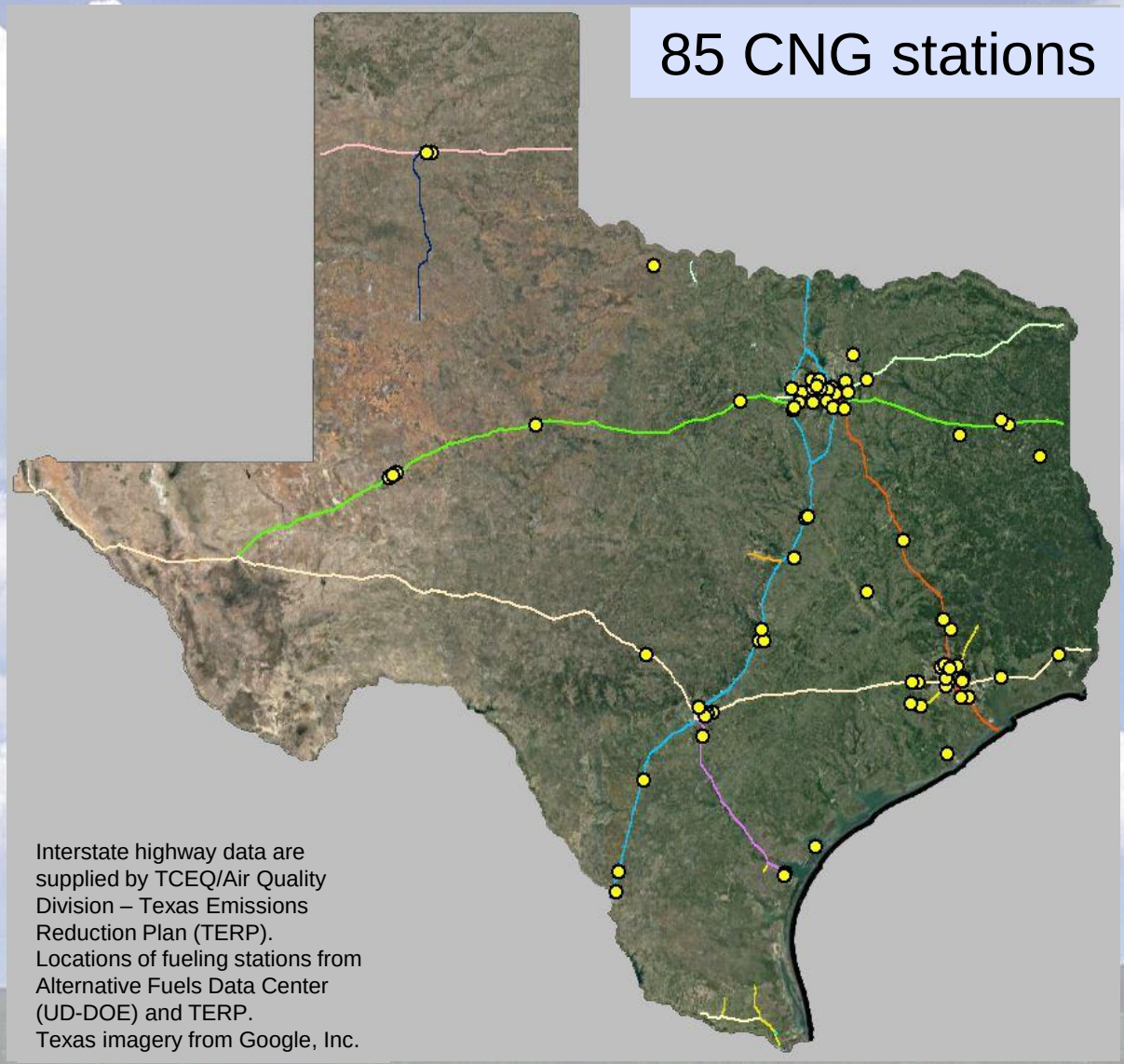
(DALLAS – FORT WORTH)



2016 TxDOT Traffic-Counting Stations

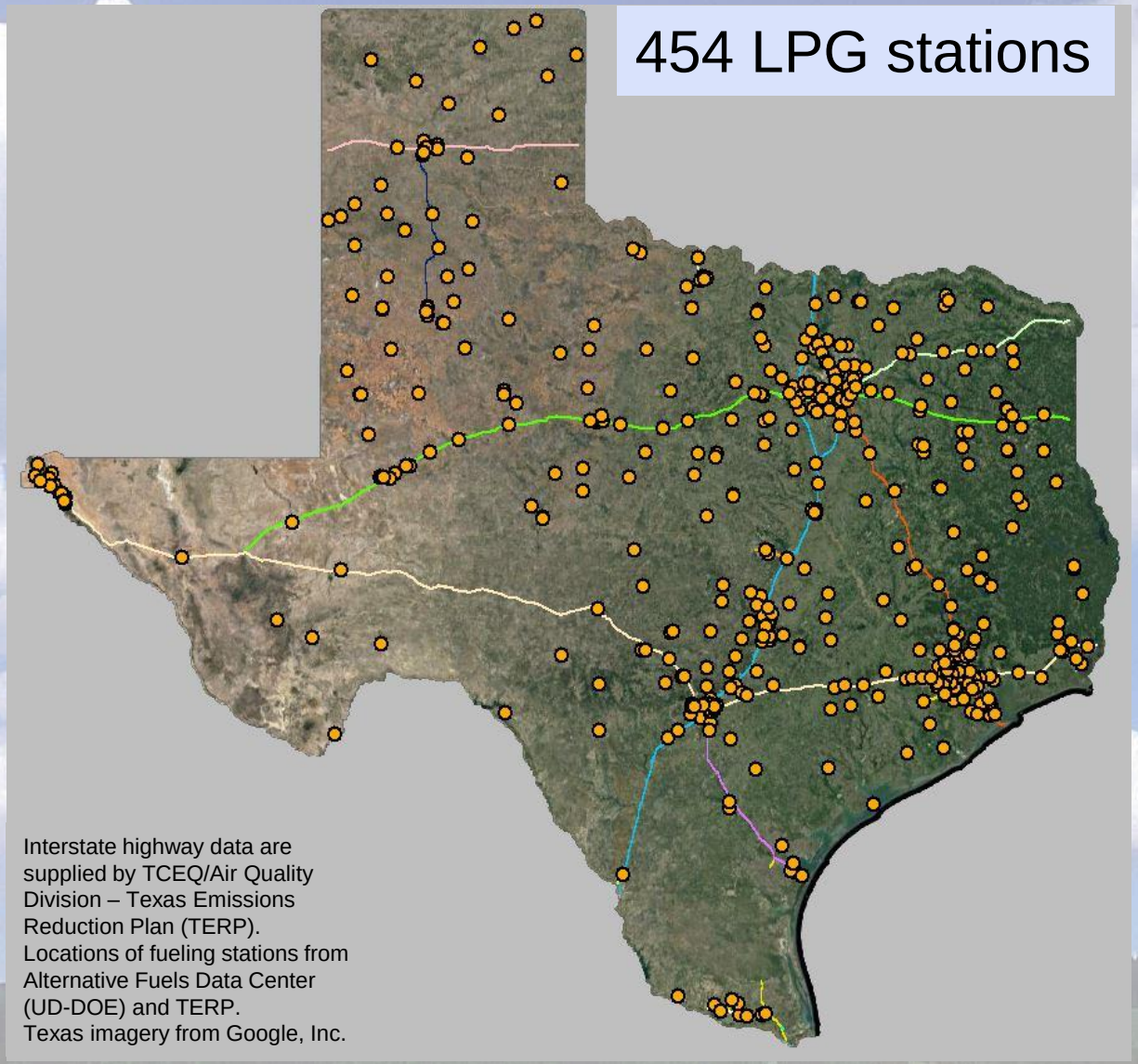


Public Operating CNG Stations

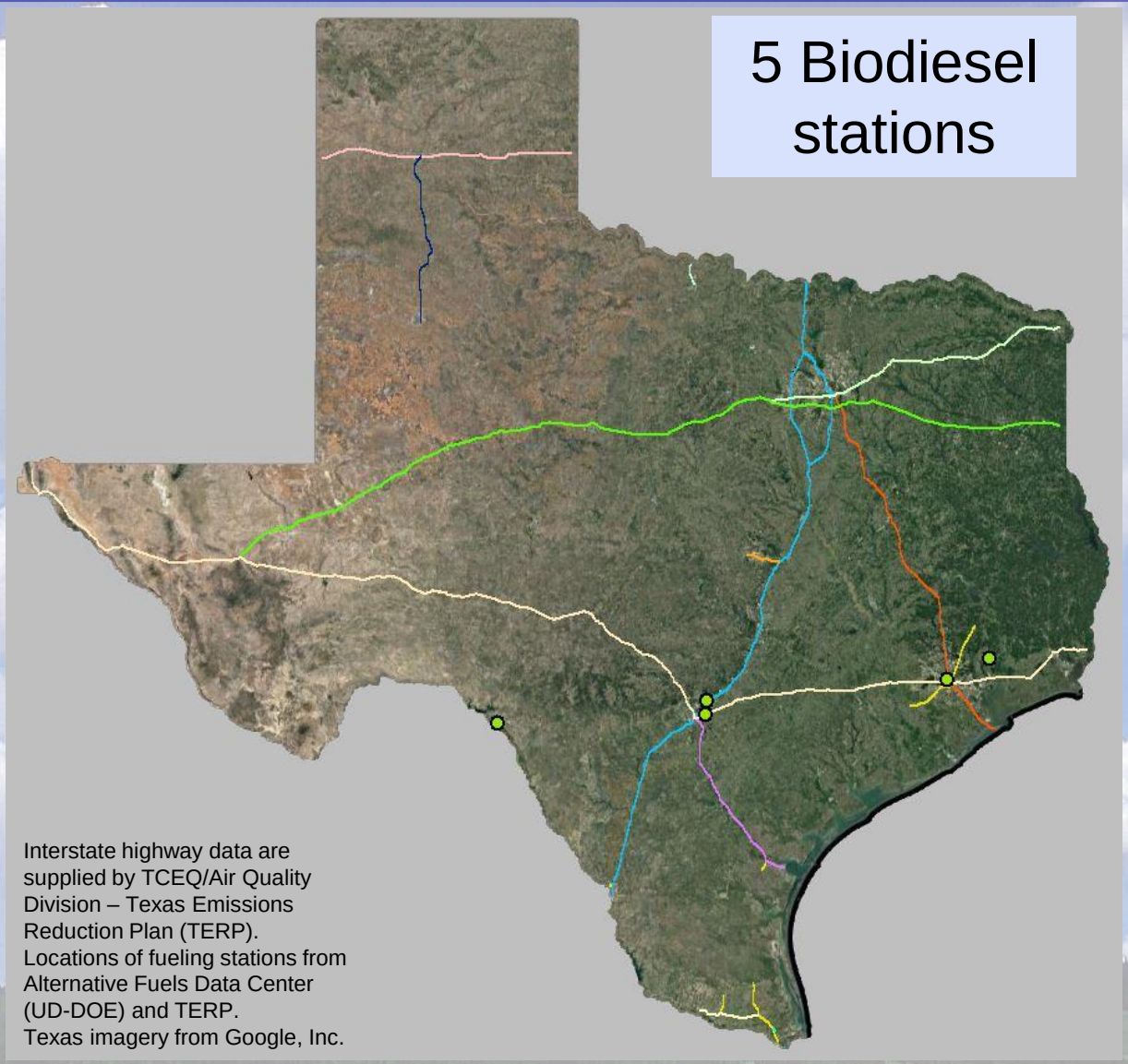


Public Operating LNG Stations

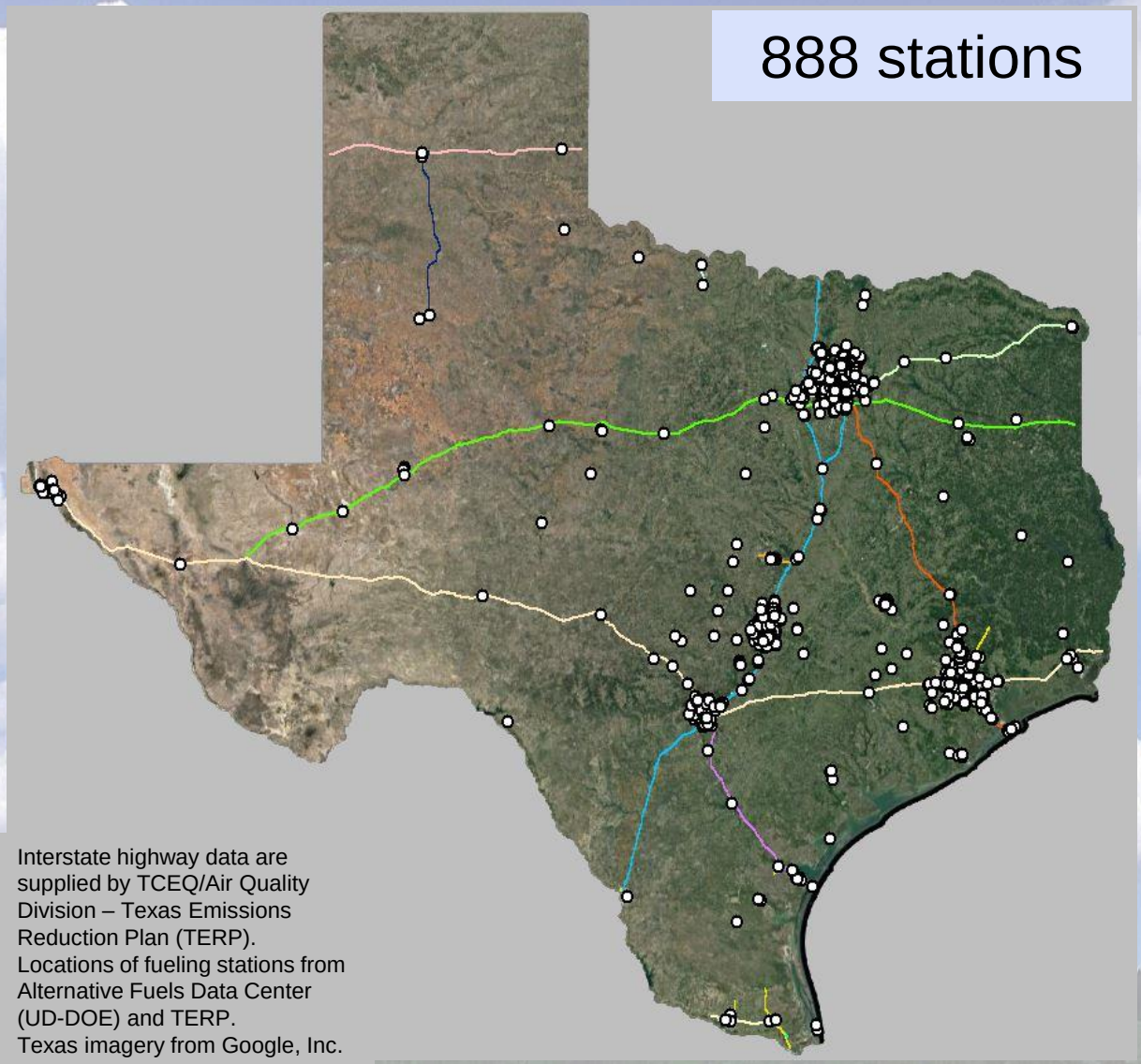
Public Operating LPG Stations



Public Operating Biodiesel Stations



Public Operating Electric Charging Stations



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Contact Information

Bogdan J. Slomka, Ph.D.

Engineering Specialist

(512) 239-1709

Bogdan.Slomka@tceq.texas.gov

TERP@tceq.texas.gov

1-800-919-TERP (8377)

www.terpgrants.org

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Thank You